

SEQUENCE LISTING

<110> Khan, Nisar A.
Benner, Robert

<120> Gene regulator

<130> 2183-5223US

<140> 10/028,075

<141> 2001-12-21

<150> EP 01203748.7

<151> 2001-10-04

<160> 175

<170> PatentIn Ver. 2.1

<210> 1

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: oligopeptide

<400> 1

Leu Gln Gly Val

1

<210> 2

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: oligopeptide

<400> 2

Ala Gln Gly Val

1

<210> 3

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: oligopeptide

<400> 3

Val Leu Pro Ala Leu Pro

1

5

```

<210> 4
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 4
Met Leu Ala Arg Arg Lys Pro Val Leu Pro Ala Leu Thr Ile Asn Pro
  1              5              10              15

<210> 5
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 5
Met Leu Ala Arg Arg Lys Pro
  1              5

<210> 6
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 6
Met Leu Ala Arg
  1

<210> 7
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide

<400> 7
Val Leu Pro Ala Leu Thr
  1              5

<210> 8
<211> 5
<212> PRT
<213> Artificial Sequence

220>

```

<223> Description of Artificial Sequence:
pdb/1QMH/1QMH-A

<400> 8
Val Leu Pro Ala Leu
1 5

<210> 9
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/4NOS/4NOS-A

<400> 9
Phe Pro Gly Cys
1

<210> 10
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hs.297775.1

<400> 10
Pro Gly Cys Pro
1

<210> 11
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swiss/P81272/NS2B HUMAN

<400> 11
Gly Val Leu Pro Ala Val Pro
1 5

<210> 12
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swiss/P81272/NS2B HUMAN

<400> 12
 Val Leu Pro Ala Val Pro
 1 5

<210> 13
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 pdb/1FZV/1FZV-A

<400> 13
 Pro Ala Val Pro
 1

<210> 14
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: oligopeptide

<400> 14
 Leu Gln Gly Val Val Pro Arg Gly Val
 1 5

<210> 15
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: oligopeptide

<400> 15
 Gly Val Val Pro
 1

<210> 16
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: oligopeptide

<400> 16
 Val Pro Arg Gly Val
 1 5

210> 17

<211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 17
 Pro Arg Gly Val
 1

 <210> 18
 <211> 5
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: polypeptide

 <400> 18
 Met Ala Pro Lys Lys
 1

 <210> 19
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 19
 Leu Gln Gly Ala
 1

 <210> 20
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 20
 Val Leu Pro Ala Leu Pro Gln Val Val Cys
 1 5 10

 <210> 21
 <211> 6
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

```

<400> 21
Ala Leu Pro Ala Leu Pro
  1                      5

<210> 22
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligopeptide

<400> 22
Val Ala Pro Ala Leu Pro
  1                      5

<210> 23
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligopeptide

<400> 23
Ala Leu Pro Ala Leu Pro Gln
  1                      5

<210> 24
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligopeptide

<400> 24
Val Leu Pro Ala Ala Pro Gln
  1                      5

<210> 25
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligopeptide

<400> 25
Val Leu Pro Ala Leu Ala Gln
  1                      5

<210> 26

```

<211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 26
 Leu Ala Gly Val
 1

 <210> 27
 <211> 6
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 27
 Val Leu Ala Ala Leu Pro
 1 5

 <210> 28
 <211> 6
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 28
 Val Leu Pro Ala Leu Ala
 1 5

 <210> 29
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 29
 Val Leu Pro Ala Leu Pro Gln
 1 5

 <210> 30
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

<400> 30
 Val Leu Ala Ala Leu Pro Gln
 1 5

<210> 31
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: oligopeptide

<400> 31
 Val Leu Pro Ala Leu Pro Ala
 1 5

<210> 32
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: oligopeptide

<400> 32
 Gly Val Leu Pro Ala Leu Pro
 1 5

<210> 33
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: oligopeptide

<400> 33
 Gly Val Leu Pro Ala Leu Pro Gln
 1 5

<210> 34
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: oligopeptide

<400> 34
 Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys
 1 5 10

<210> 35

<211> 38
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 35
 Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu Pro
 1 5 10 15
 Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu
 20 25 30
 Ser Cys Gln Cys Ala Leu
 35

 <210> 36
 <211> 15
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 36
 Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys
 1 5 10 15

 <210> 37
 <211> 20
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

 <400> 37
 Glu Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly
 1 5 10 15
 Tyr Cys Pro Thr
 20

 <210> 38
 <211> 18
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: oligopeptide

<400> 38
Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly
1 5 10 15

Pro Ser

<210> 39
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligopeptide

<400> 39
Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser
1 5 10 15

<210> 40
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligopeptide

<400> 40
Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser
1 5 10

<210> 41
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligopeptide

<400> 41
Leu Pro Gly Cys
1

<210> 42
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligopeptide

<400> 42
Met Thr Arg Val
1

<210> 43
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligopeptide

<400> 43
Gln Val Val Cys
1

<210> 44
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide
signalling molecule

<400> 44
Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val
1 5 10 15

Cys

<210> 45
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide
signalling molecule

<400> 45
Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys Glu
1 5 10 15

Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly Tyr
20 25 30

Cys Pro Thr
35

<210> 46
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: peptide
signalling molecule

<400> 46
 Cys Ala Leu Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp
 1 5 10 15

His Pro Leu Thr Cys
 20

<210> 47
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: peptide
 signalling molecule

<400> 47
 Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
 1 5 10 15

Thr Cys

<210> 48
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: peptide
 signalling molecule

<400> 48
 Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala Pro
 1 5 10 15

Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
 20 25 30

Pro Ile Leu Pro Gln
 35

<210> 49
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: peptide
 signalling molecule

<400> 49
 Leu Gln Gly Val Leu Pro Ala Leu Pro Gln
 1 5 10

<210> 50
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: NMPF peptide

 <400> 50
 Cys Pro Arg Gly Val Asn Pro Val Val Ser
 1 5 10

 <210> 51
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: probe to
 represent the NF-kappaB binding sequence

 <400> 51
 agctcagagg gggactttcc gagag 25

 <210> 52
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: peptide LQAV
 showed smaller infarcted area

 <400> 52
 Leu Gln Ala Val
 1

 <210> 53
 <211> 5
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1DE7/1DE7-A

 <400> 53
 Leu Gln Gly Val Val
 1 5

 <210> 54
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 pdb/1DE7/1DE7-A

 <400> 54
 Leu Gln Gly Val Val Pro
 1 5

 <210> 55
 <211> 5
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1DL6/1DL6-A

 <400> 55
 Leu Asp Ala Leu Pro
 1 5

 <210> 56
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1QMH/1QMH-A

 <400> 56
 Leu Gln Thr Val
 1

 <210> 57
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1QMH/1QMH-A

 <400> 57
 Leu Val Leu Gln Thr Val Leu Pro Ala Leu
 1 5 10

 <210> 58
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: pdb/1LYP/1LYP

<400> 58
 Ile Gln Gly Leu
 1

<210> 59
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: pdb/1LYP/1LYP

<400> 59
 Leu Pro Lys Leu
 1

<210> 60
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: pdb/1LYP/1LYP

<400> 60
 Leu Leu Pro Lys Leu
 1 5

<210> 61
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 pdb/1B90/1B90-A

<400> 61
 Leu Pro Glu Leu
 1

<210> 62
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 pdb/1GLU/1GLU-A

<400> 62
 Pro Ala Arg Pro
 1

<210> 63
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/2KIN/2KIN-B

 <400> 63
 Met Thr Arg Ile
 1

 <210> 64
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1SMP/1SMP-I

 <400> 64
 Leu Gln Lys Leu
 1

 <210> 65
 <211> 5
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1SMP/1SMP-I

 <400> 65
 Leu Gln Lys Leu Leu
 1 5

 <210> 66
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1SMP/1SMP-I

 <400> 66
 Pro Glu Ala Pro
 1

 <210> 67
 <211> 9

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1SMP/1SMP-I

 <400> 67
 Leu Gln Lys Leu Leu Pro Glu Ala Pro
 1 5

 <210> 68
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: pdb/1ES/1ES7-B

 <400> 68
 Pro Thr Leu Pro
 1

 <210> 69
 <211> 5
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: pdb/1ES/1ES7-B

 <400> 69
 Leu Gln Pro Thr Leu
 1 5

 <210> 70
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1BHX/1BHX-F

 <400> 70
 Leu Gln Val Val
 1

 <210> 71
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>

<223> Description of Artificial Sequence:
pdb/1VCB/1VCB-A

<400> 71
Pro Glu Leu Pro
1

<210> 72
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1CQK/1CQK-A

<400> 72
Pro Ala Ala Pro
1

<210> 73
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1CQK/1CQK-A

<400> 73
Pro Ala Ala Pro Gln
1 5

<210> 74
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1CQK/1CQK-A

<400> 74
Pro Ala Ala Pro Gln Val
1 5

<210> 75
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pdb/1BFB/1BFB

<400> 75
 Leu Pro Ala Leu
 1

<210> 76
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: pdb/1BFB/1BFB

<400> 76
 Pro Ala Leu Pro
 1

<210> 77
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: pdb/1BFB/1BFB

<400> 77
 Pro Ala Leu Pro Glu
 1 5

<210> 78
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 pdb/1R2A/1R2A-A

<400> 78
 Leu Thr Glu Leu Leu
 1 5

<210> 79
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: C3G peptide

<400> 79
 Pro Pro Pro Ala Leu Pro Pro Lys Lys Arg
 1 5 10

<210> 80

<211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1RLQ/1RLQ-R

 <400> 80
 Leu Pro Pro Leu
 1

 <210> 81
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1RLQ/1RLQ-R; swissnew/P01229/LSHB HUMAN

 <400> 81
 Pro Pro Leu Pro
 1

 <210> 82
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: pdb/1TNT/1TNT

 <400> 82
 Leu Pro Gly Leu
 1

 <210> 83
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1GJS/1GJS-A

 <400> 83
 Leu Ala Ala Leu
 1

 <210> 84
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1GJS/1GJS-A

<400> 84
Leu Ala Ala Leu Pro
1 5

<210> 85
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1GBR/1GBR-B

<400> 85
Pro Lys Leu Pro
1

<210> 86
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1A78/1A78-A

<400> 86
Val Leu Pro Ser Ile Pro
1 5

<210> 87
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1FZV/1FZV-A

<400> 87
Met Leu Pro Ala Val Pro
1 5

<210> 88
<211> 4
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1JLI/1JLI

<400> 88
Leu Pro Cys Leu
1

<210> 89
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pdb/1JLI/1JLI

<400> 89
Pro Cys Leu Pro
1

<210> 90
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1HSS/1HSS-A

<400> 90
Val Pro Ala Leu Pro
1 5

<210> 91
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1PRX/1PRX-A

<400> 91
Pro Thr Ile Pro
1

<210> 92
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
pdb/1PRX/1PRX-A

<400> 92

Val Leu Pro Thr Ile Pro
1 5

<210> 93

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1RCY/1RCY

<400> 93

Val Leu Pro Gly Phe Pro
1 5

<210> 94

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1A3Z/1A3Z

<400> 94

Pro Gly Phe Pro
1

<210> 95

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
pdb/1GER/1GER-A

<400> 95

Leu Pro Ala Leu Pro
1 5

<210> 96

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1BBS/1BBS

<400> 96

Met Pro Ala Leu Pro
1 5

<210> 97

<211> 17

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: AI188872

<220>
<221> MISC
<222> (2)
<223> The 'Xaa' at position indicates an unknown amino acid

<400> 97
Met Xaa Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val
1 5 10 15

Cys

<210> 98
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: AI188872

<220>
<221> MISC
<222> (2)
<223> The 'Xaa' at position 2 indicates an unknown amino acid

<400> 98
Met Xaa Arg Val
1

<210> 99
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: AI126906

<400> 99
Ile Thr Arg Val Met Gln Gly Val Ile Pro Ala Leu Pro Gln Val Val
1 5 10 15

Cys

<210> 100
<211> 16
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: AI221581

<400> 100

Met	Thr	Arg	Val	Leu	Gln	Val	Val	Leu	Leu	Ala	Leu	Pro	Gln	Leu	Val
1				5				10						15	

<210> 101

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.42246.3

<400> 101

Lys	Val	Ile	Gln	Gly	Ser	Leu	Asp	Ser	Leu	Pro	Gln	Ala	Val
1			5					10					

<210> 102

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.42246.3

<400> 102

Leu	Asp	Ser	Leu
1			

<210> 103

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.22430.1

<400> 103

Val	Leu	Gln	Ala	Ile	Leu	Pro	Ser	Ala	Pro	Gln
1				5					10	

<210> 104

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.22430.1

<400> 104

Leu Gln Ala Ile Leu
1 5

<210> 105
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Mm.22430.1

<400> 105
Pro Ser Ala Pro
1

<210> 106
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hs.63758.4

<400> 106
Lys Val Leu Gln Gly Arg Leu Pro Ala Val Ala Gln Ala Val
1 5 10

<210> 107
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hs.63758.4

<400> 107
Leu Pro Ala Val
1

<210> 108
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Mm.129320.2

<400> 108
Leu Val Gln Lys Val Val Pro Met Leu Pro Arg Leu Leu Cys
1 5 10

<210> 109
<211> 4
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.129320.2

<400> 109
Leu Pro Arg Leu
1

<210> 110
<211> 4
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.129320.2

<400> 110
Pro Met Leu Pro
1

<210> 111
<211> 5
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.22430.1

<400> 111
Pro Ser Ala Pro Gln
1 5

<210> 112
<211> 11
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: P20155

<400> 112
Leu Pro Gly Cys Pro Arg His Phe Asn Pro Val
1 5 10

<210> 113
<211> 11
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Rn.2337.1

<400> 113

Leu Val Gly Cys Pro Arg Asp Tyr Asp Pro Val
1 5 10

<210> 114

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Rn.2337.1

<400> 114

Leu Val Gly Cys

1

<210> 115

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hs.297775.1

<400> 115

Pro Gly Cys Pro Arg Gly

1

5

<210> 116

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.1359.1

<400> 116

Leu Pro Gly Cys Pro

1

5

<210> 117

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/056177/056177

<400> 117

Val Leu Pro Ala Ala Pro

1

5

<210> 118

<211> 9

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9W234/Q9W234

 <400> 118
 Leu Ala Gly Thr Ile Pro Ala Thr Pro
 1 5
 <210> 119
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9W234/Q9W234

 <400> 119
 Pro Ala Thr Pro
 1

 <210> 120
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9IYZ3/Q9IYZ3

 <400> 120
 Gly Leu Leu Pro Cys Leu Pro
 1 5

 <210> 121
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9PVW5/Q9PVW5

 <400> 121
 Pro Gly Ala Pro
 1

 <210> 122
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9PVW5/Q9PVW5

 <400> 122
 Leu Pro Gln Arg Pro Arg Gly Pro Asn Pro
 1 5 10

 <210> 123
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9PVW5/Q9PVW5

 <400> 123
 Pro Arg Gly Pro
 1

 <210> 124
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Hs.303116.2

 <400> 124
 Gly Cys Pro Arg
 1

 <210> 125
 <211> 6
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1DU3/1DU3-A

 <400> 125
 Gly Cys Pro Arg Gly Met
 1 5

 210> 126
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: pdb/1BIO/1BIO

<400> 126
 Leu Gln His Val
 1

<210> 127
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 pdb/1FL7/1FL7-B

<400> 127
 Val Pro Gly Cys
 1

<210> 128
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 pdb/1HR6/1HR6-A

<400> 128
 Cys Pro Arg Gly
 1

<210> 129
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: pdb/1H6/1HR6-A

<400> 129
 Leu Lys Gly Cys
 1

<210> 130
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 130
 Pro Pro Gly Pro
 1

<210> 131
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 131
Leu Pro Gly Cys Pro Arg Glu Val
1 5

<210> 132
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 132
Cys Pro Arg Glu
1

<210> 133
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/P01229/LSHB HUMAN

<400> 133
Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Leu Pro Gln Val Val
1 5 10 15

Cys

<210> 134
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/P01229/LSHB HUMAN

<400> 134
Met Met Arg Val
1

<210> 135

<211> 6
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/P01229/LSHB HUMAN

 <400> 135
 Val Leu Pro Pro Leu Pro
 1 5

 <210> 136
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/P01229/LSHB HUMAN

 <400> 136
 Val Leu Pro Pro Leu Pro Gln
 1 5

 <210> 137
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/P01229/LSHB HUMAN

 <400> 137
 Ala Val Leu Pro Pro Leu Pro
 1 5

 <210> 138
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/P01229/LSHB HUMAN

 <400> 138
 Ala Val Leu Pro Pro Leu Pro Gln
 1 5

 <210> 139
 <211> 17
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 139

Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Val Pro Gln Val Val
1 5 10 15

Cys

<210> 140

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 140

Leu Gln Ala Gly
1

<210> 141

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 141

Val Leu Pro Pro Val Pro
1 5

<210> 142

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 142

Val Leu Pro Pro Val Pro Gln
1 5

<210> 143

<211> 7

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/P07434/CGHB PAPAN

 <400> 143
 Ala Val Leu Pro Pro Val Pro
 1 5

 <210> 144
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/P07434/CGHB PAPAN

 <400> 144
 Ala Val Leu Pro Pro Val Pro Gln
 1 5

 <210> 145
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/Q28376/TS HB HORSE

 <400> 145

 Met Thr Arg Asp
 1

 <210> 146
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/Q28376/TS HB HORSE

 <400> 146
 Gln Asp Val Cys
 1

 <210> 147
 <211> 4
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/Q28376/TSHB HORSE

<400> 147

Ile Pro Gly Cys
1

<210> 148

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/Q9Z284/Q9Z284

<400> 148

Pro Ala Leu Pro Ser
1 5

<210> 149

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/Q9UCG8/Q9UCG8

<400> 149

Leu Pro Gly Gly Pro Arg
1 5

<210> 150

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/Q9UCG8/Q9UCG8

<400> 150

Leu Pro Gly Gly
1

<210> 151

<211> 4

<212> PRT

<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9UCG8/Q9UCG8

 <400> 151
 Gly Gly Pro Arg
 1

 <210> 152
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: XP_028754

 <400> 152
 Leu Gln Arg Gly
 1

 <210> 153
 <211> 5
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: XP_028754

 <400> 153
 Leu Gln Arg Gly Val
 1 5

 <210> 154
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: XP_028754

 <400> 154
 Leu Gly Gln Leu
 1

 <210> 155
 <211> 13
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: SignalP (CBS)

 <400> 155

Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro
1 5 10

<210> 156
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 156
Val Leu Gln Gly Val Leu Pro Ala Leu
1 5

<210> 157
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 157
Gly Val Leu Pro Ala Leu Pro Gln Val
1 5

<210> 158
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 158
Val Leu Pro Ala Leu Pro Gln Val Val
1 5

<210> 159
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 159

Arg Leu Pro Gly Cys Pro Arg Gly Val
1 5

<210> 160

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 160

Thr Met Thr Arg Val Leu Gln Gly Val
1 5

<210> 161

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: MHC II (H2-Ak
15-mers)

<400> 161

Cys Pro Thr Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu
1 5 10 15

<210> 162

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: MHC II (H2-Ak
15-mers)

<400> 162

Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val
1 5 10 15

<210> 163

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA-DRB1*0101
15-mers

<400> 163

Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser
1 5 10 15

<210> 164
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0101
15-mers

<400> 164
Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val
1 5 10 15

<210> 165
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0101
15-mers

<400> 165
Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr
1 5 10 15

<210> 166
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0301
(DR17) 15-mers

<400> 166
Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val
1 5 10 15

<210> 167
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0301
(DR17) 15-mers

<400> 167
Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val
1 5 10 15

<210> 168

<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-56
peptide

<400> 168
Val Ala Pro Ala Leu Pro Gln
1 5

<210> 169
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-62
peptide

<400> 169
Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu Pro
1 5 10 15

Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu
20 25 30

Ser Cys Gly
35

<210> 170
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-67
peptide

<400> 170
Cys Pro Arg Gly Val Asn Pro
1 5

<210> 171
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-70
peptide

<400> 171

Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln
1 5 10

<210> 172
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-75
peptide

<400> 172
Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly
1 5 10 15

Pro Cys

<210> 173
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-56
peptide

<400> 173
Val Ala Pro Ala Leu Pro Gln
1 5

<210> 174
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-71
peptide

<400> 174
Met Thr Arg Val Leu Pro Gly Val Leu Pro Ala Leu Pro Gln Val Val
1 5 10 15

Cys

<210> 175
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF peptide

<400> 175
Cys Arg Gly Val Asn Pro Val Val Ser
1 5